PORT
OF SEATTLE
100
CENTENNIAL
1911~2011

Destination: Sustainability

Environmental Annual Report 2010/2011

Preparing for the next century. And beyond.

The Port of Seattle centennial is an important milestone that gives us a chance to look back at a century of accomplishment and reflect on how we—and the world—have changed in that time. While we celebrate the past, we're also taking the opportunity to learn from it, tapping our history to help us set a course for the century to come.

Some things certainly look different at the port than they did in 1911. But as our passengers take off from the runways of Sea-Tac, ships set sail from our seaport, and innovative thinking drives responsible progress at every one of our properties and projects, our heading at the Port of Seattle remains constant: **toward a more sustainable, vital, and productive future for our region and our world.**

CONTENTS
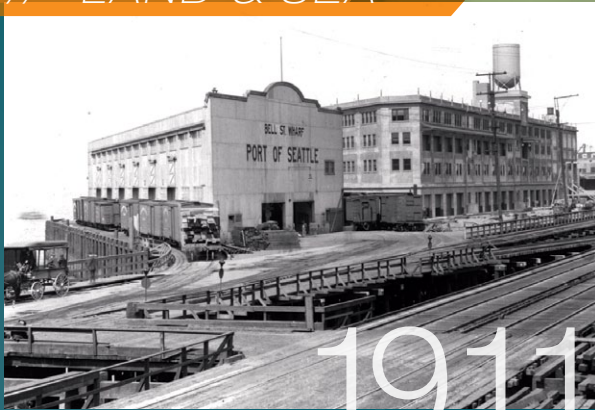
// LAND & SEA

1911

2010

// AIR

1944

2009

LAND, SEA & AIR AT A GLANCE_ *from left to right*

LAND & SEA_1911 Pier 66 / Bell Street Pier was one of the first six properties the Port developed, and it became the first headquarters for the Port of Seattle in 1915. **2010** Port of Seattle headquarters at Pier 69 is managed for energy efficiency.

AIR_1944 Sea-Tac Airport's original "crosswind" runways were designed for landings and takeoffs in almost any wind direction. **2009** Sea-Tac's three parallel runways are designed to reduce flight delays for jet aircraft and improve operating efficiency in nearly all types of weather.
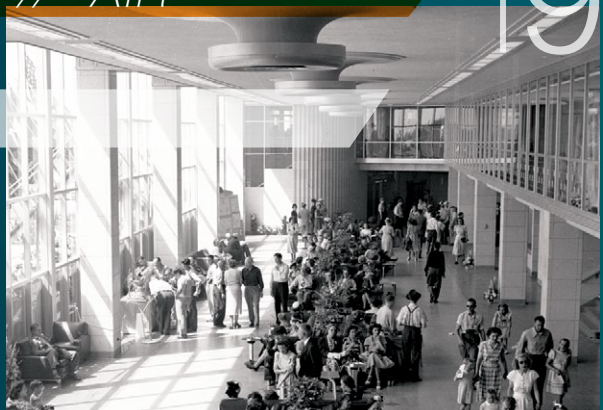
// *LAND & SEA*
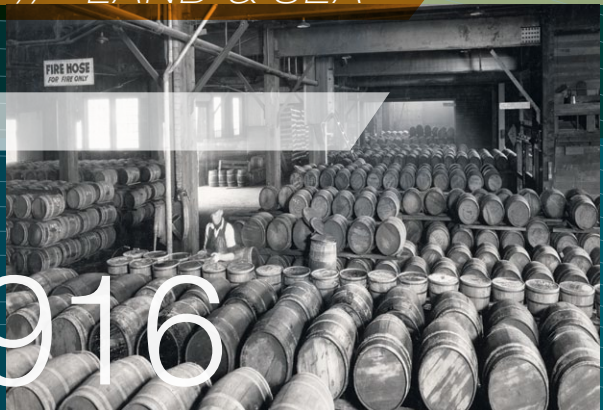
1962

1916

// *AIR*

1952

LAND & SEA *AT A GLANCE_top row from left to right*

1916 A bounty of herring and salmon stored in barrels are a major export from this Seattle warehouse.

1931 Spokane Street Terminal houses the first USDA Frozen Pack Laboratory, to research preserving fruits and vegetables by freezing. **1962** Before containerization is adopted in this decade, cargo is loaded using ship's gear and manpower, and later operations shift to megacranes operating on electrical power.

1996 One of a kind in Seattle's downtown, Bell Harbor Marina is completed as part of the Central Waterfront Revitalization Project. **2011** In honor of the Port of Seattle Centennial, Elliott Bay Park is renamed "Centennial Park" on Earth Day, April 22.

2011

1977

2010
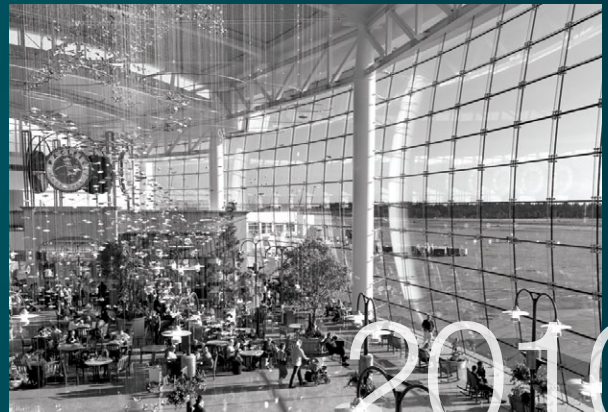
AIR AT A GLANCE_ *bottom row from left to right*

1952 An NBC newscaster calls Sea-Tac Airport's administration building the most functional airport building in the country. **1966** By the mid-60s, Sea-Tac Airport passenger numbers approach the 3 million mark; in 2011 that number will exceed 31 million. **1970** Flying Tiger Airlines is the only freight service at Sea-Tac Airport until the 1970s. **1977** Sea-Tac receives the first permanent computer system for clearing passengers through U..S Customs, speeding up the process tremendously. **2010** Sea-Tac's Central Terminal window wall overlooks the airfield where a new direct fueling system for aircraft eliminates the need for fueling trucks.
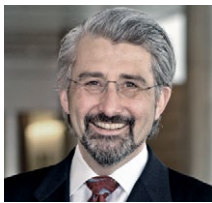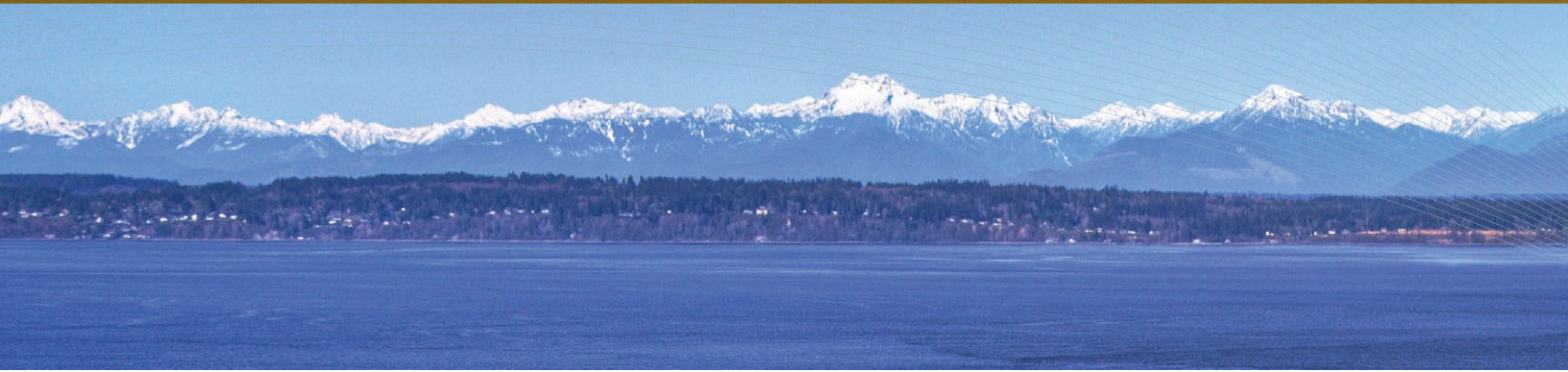
A more vital 2011: already under way

A message from Commission President Bill Bryant

As the Port of Seattle Commission finished the year 2010, we had many reasons to be proud. In the pages that follow, you'll read a lot about the innovation, projects, and outreach that made the year a success for the port and a positive way to begin our centennial year.

But just as important as what we've achieved—over the course of one year or 100—is what lies ahead for the port. Becoming the Green Gateway is about providing an open door to help customers improve their performance, and nurturing ideas that are good for business and community. It's about leadership, too—answering the call for ways to reduce our nation's reliance on fossil fuels without limiting the commerce and travel that support our economy.

To that end, the commissioners authorized a budget that reflects the priorities of generating jobs and protecting the environment, and that already has allowed us to hit the ground running in 2011. Throughout the coming months we'll be channeling these funds to make a difference across port facilities and in our neighboring communities. One of the best examples is our cleanup of Terminal 117, an early action area in the Lower Duwamish Waterway Superfund Site. The port is partnering with the City of Seattle under the direction of the EPA to clean up this site. An important part of the 117 project is outreach to the South Park and other communities.

Partnership also plays a role in one of the port's farthest-reaching initiatives, the Northwest Ports Clean Air Strategy. Since 2007, we've worked with the Port of Tacoma and Port Metro Vancouver to establish emission reduction goals for ocean-going vessels, cargo-handling equipment, rail, harbor vessels, and drayage trucks. As you'll see throughout this Environmental Report, programs like ABC

Fuels and Clean Trucks are making a significant impact, and we expect to see even greater results when we report to you next year.

At Sea-Tac, a record-setting grant from the Federal Aviation Administration is funding the installation of an innovative air-conditioning system for parked aircraft that will lower CO_2 emissions by more than 50,000 metric tons annually, drastically cut fuel use, and save our airline partners millions of dollars—one more extraordinary reason companies will continue to choose the Green Gateway for doing business. The airport also is working with our airline partners on an innovative approach to electrify the ground support equipment that service aircraft.

In the end, it's about ensuring livable communities that offer both good family-wage jobs and a clean environment. Our region depends on the good jobs the port creates, and all of us depend on the air we breathe. The programs we have in place—and the new ideas we're always looking for—support both. And they're working.

Bill Bryant
Commission President

Building the Green Gateway

A message from CEO Tay Yoshitani

As the Port of Seattle marks a singular anniversary, we're in a battle. We're fighting for a more sustainable future for our region—to keep jobs and economic growth right here, and at the same time ensure that we protect our environment. Now more than ever, that challenging balance also is our competitive advantage.

The Port of Seattle is the Green Gateway—closer to Asia than any other US Port, and able to offer shorter ocean transit times and lower fuel consumption for shippers looking to reach the American Heartland. That makes us a good business choice for customers, and the resulting reduction in greenhouse gas emissions makes us a smart choice for our world. In fact, the study we released in 2009 confirms that Puget Sound ports offer the lowest carbon footprint for cargo shipped by sea and then rail from Asia to major markets in the Midwest.

But the Green Gateway is more than an ocean route. It's also a statement to customers, tenants, and communities that environmental stewardship is a high priority for all the businesses of the port—one that helps us offer trading partners and the traveling public an international gateway that is clean, energy-efficient, and improving every day.

Today the Port of Seattle is a place where passengers can ride in compressed natural gas-powered taxis and take quieter flights departing from runways built from recycled concrete and state-of-the-art materials. Where shipping carriers use cleaner fuels when at berth and port staff operate one of the greenest fleets in the country. We are continually putting our organization's values into practice, exploring new technologies that can help us lower pollution, replace old processes, and reduce environmental impacts in our community.

The results of the projects and programs in this Environmental Report make one thing abundantly clear. We do not need to choose between ecology and economy. With the right partnerships, the right business culture, and the right commitment, we can balance the benefits of international trade and travel with actions that will sustain our environment and community. We can win the battle.

Tay Yoshitani
Chief Executive Officer

Innovation: history as it's happening

The story of the Port of Seattle is a timeline of challenges and solutions that spans 100 years—and counting. Every day, throughout our businesses, facilities and properties, we're taking innovative steps to put our commitment to environmental stewardship into action and do our part for a more sustainable Puget Sound region.

REMOTE CONTROL COYOTE

We don't have roadrunners in the Pacific Northwest, but there's still lots of work to do around here for a plastic coyote. Affixed to a toy remote control airboat, he's an inexpensive, non-lethal way to scare away birds that present a potential hazard to Sea-Tac Airport aircraft. See the video at:
youtube.com/user/PortofSeattle

Off-Aircraft Recycling Takes Off at Sea-Tac

Helping airlines reduce waste—and save

As part of our goal to recycle 50% of our waste by 2014, a centralized airfield trash and recycling collection system at Sea-Tac will help reduce waste sent to landfills, improve ramp safety, decrease air emissions, and reduce costs for both airlines and the Port. Six trash/recycling pairs of large-capacity, computer-monitored compactors have been installed on the airfield at convenient locations, making recycling easier for all airlines.

During 2010, 90 percent of Sea-Tac airlines participated, diverting more than 180 tons of recyclable material from landfill—equivalent to the weight of almost five Boeing 737 aircraft. The large-capacity compactors have reduced collection trips by 75 percent—costs that airlines previously shouldered. Participation is expected to improve as airlines enhance recycling programs and become more familiar with the airfield compactor system.

Shedding New Light on Energy Use

Port replaces outdated floodlamps

Along Terminal 46, the 630 older floodlamp fixtures have been replaced with 300 energy-efficient high-pressure sodium vapor lamps. The new high-mast, fully shielded lamps comply with International Dark-sky Association guidelines that permit use of outdoor light for safety and security while reducing the negative effects of night lighting. With their longer lifespanof four to five years, and energy efficiency, the lamps are expected to conserve about 1,200,000 kWh per year and save up to $140,000 in yearly operational and maintenance costs. The port worked on the re-lamping project with Total Terminals International Company and the City of Seattle, which contributed more than $325,000 in Energy Smart Services rebates.

The cooperation we have received and the help and education we have received is unprecedented. And I believe it is a wonderful model, for the whole country, of how people can come together and work together for a very positive solution.

— Robin Guevarra, South Park community member

Terminal 117 Cleanup Project Outreach Goals:

- Develop and maintain public recognition, familiarity and trust/ confidence

- Educate and inform stakeholders on key facts and messages (including soliciting and gathering feedback)

- Reach and acquaint those who remain uninformed and apprehensive about the message or plan

Historic Clean-Up at Terminal 117

Partnership, commitment, and education

Situated along the Duwamish Waterway, the original industrial use of Terminal 117 (T-117) was asphalt manufacturing. The soil contamination left behind includes high concentrations of PCBs and dioxin/furans in the upland property, river bank, and waterway sediments. Designated by the EPA as an Early Action Area of the Lower Duwamish Waterway Superfund Site, the cleanup at T-117 is a joint project between Port of Seattle and the City of Seattle, with EPA oversight and peer review from the Washington State Department of Ecology.

Outreach efforts have included briefings for residents and businesses, river festivals, a health fair, and educational activities for kids (including coloring posters, below), all helping to generate local interest and support for this critical restoration project.
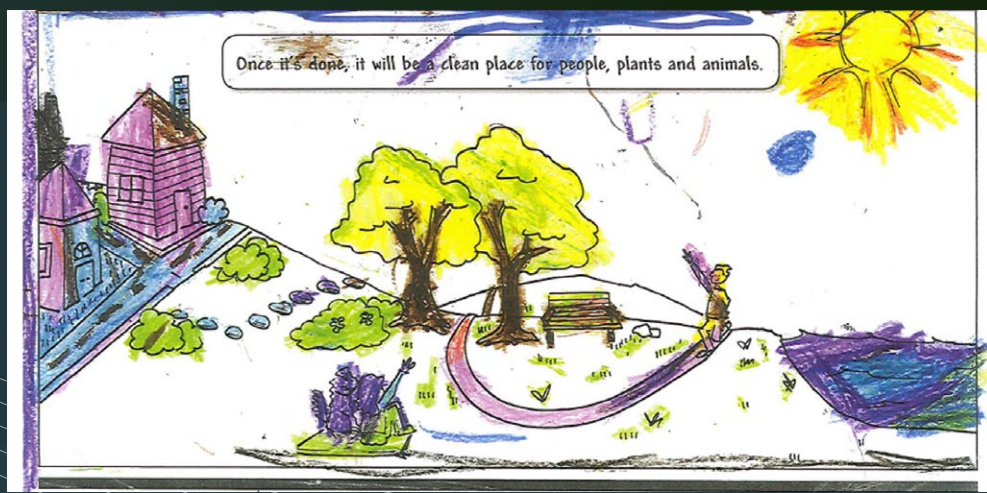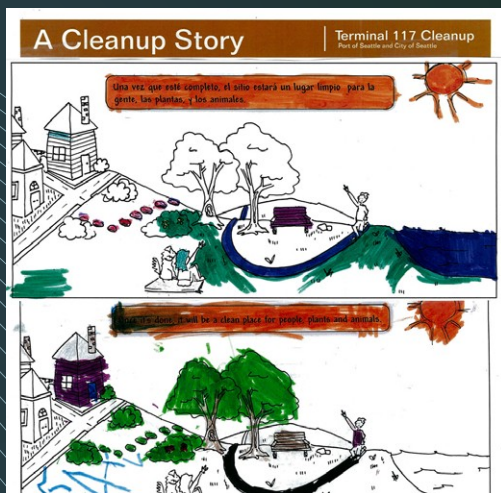
TERMINAL 117 CLEANUP

2005	Interim street cleanup and resurfacing
Fall 2006	Hot spot cleanup
Summer 2008	Expanded cleanup area order
2008-2009	T-117 bank repair
Spring 2010	Soil sampling and determinig street boundaries
Fall 2010	Cleanup plan public review
2011	EPA Action Memorandum
2012-2013	Cleanup design
2013-2014	Habitat design, site redevelopment, construction

Clean air, climate change

As we enter the next era in Port of Seattle history, few aspects of our environmental leadership are as critical as our commitment to improving air quality and reducing our carbon footprint.

Sea-Tac Airport Receives Record FAA Grant

Reducing emissions and saving millions of dollars

Air-conditioning and heating may not be the first things that come to mind when reducing greenhouse gas emissions. With a $21.9 million Voluntary Airport Low Emissions (VALE) Grant from the Federal Aviation Administration, that's exactly the plan for Seattle-Tacoma International Airport. A new project will allow aircraft to hook up to pre-conditioned air provided by the airport at each gate, allowing aircraft to shut down their auxiliary power units, saving fuel and reducing CO_2 gases and other emissions.

Once installed, the air-conditioning and heating system is expected to reduce CO_2 emissions by more than 40,000 metric tons—the equivalent of taking 8,700 cars

1985_Sea-Tac provides sound insulation and home selling assistance to help mitigate aircraft noise.

2004_Cruise lines calling in Seattle agree to tough standards for wastewater treatment and discharge.
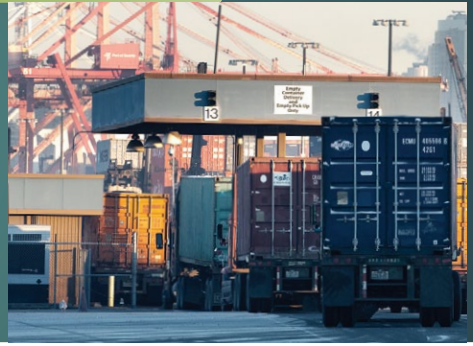
2010_Drayage trucks adhere to new Clean Truck guidelines to enter Port of Seattle cargo terminals.

off the road—reduce aircraft noise, and save airlines up to five million gallons of fuel and $10 million in fuel costs per year. The FAA grant—the largest of its kind ever awarded—will fund the $33 million project, due for completion by the end of 2012. The remaining costs will come directly from fees charged to airlines, which will be more than offset by the significant decrease in their operating costs.

*SEA-TAC AIRPORT
AIR-CONDITIONING SYSTEM*

REDUCING CO_2 EMISSIONS BY 40,000 METRIC TONS A YEAR IS LIKE TAKING

8,700 CARS OFF THE ROAD

Good Marks for Northwest Ports on Air Quality

2009 report shows real progress

In early 2008, the Port of Seattle Commission adopted the Northwest Ports Clean Air Strategy, a voluntary and collaborative effort of the ports of Seattle, Tacoma, and Vancouver (B.C.) to reduce maritime and port-related emissions that affect air quality and climate change in the region. Results in the 2010 Implementation Report show that Port of Seattle programs—and participation by the private sector—have successfully improved the air quality from shipping and cruise vessels berthing at port facilities, cargo handling equipment, and trucks serving port terminals.

Find details on the success of each in separate articles on the following pages.

At-Berth Clean Fuels Program Participation Soars

Carrier partnerships spell success for pollution goals

Since 2009, our At-Berth Clean (ABC) Fuels program has encouraged shipping and cruise lines to burn low-sulfur fuel while at berth at the port, and to date has eliminated more than 340 metric tons of sulfur dioxide emissions. Certainly a part of that impact is due to the fuel itself, which is estimated to reduce sulfur dioxide emissions by 80 percent and diesel particulate matter by more than 60 percent. But there's

another piece the ABC Fuels program could not succeed without: the involvement of our carrier partners.

2010 saw a steady increase in participation, with more than 75 vessels from nine carriers and nearly 400 qualifying vessel visits to the port by year-end. Carriers receive an incentive of $2,250 for use of the low-sulfur fuel in auxiliary engines for each call. The spike in participation made ABC Fuels one of the Seaport's most successful environmental initiatives to-date, and resulted in an increase in funding to a total of $950,000 for the year. We expect this success to continue throughout 2011.

400,000

GALLONS OF FUEL TO BE SAVED USING
ELECTRIC REPLACEMENT VEHICLES

Airport Ground Support Vehicles Go Electric

DOE grant charges up equipment replacement at Sea-Tac

We're all familiar with the tractors and loading equipment that work around an airplane before takeoff. Now, with a $5 million grant from the U.S. Department of Energy's Puget Sound Clean Cities Coalition, some of the Sea-Tac Airport ground support equipment that runs on fossil fuels will begin to be replaced by cleaner electric vehicles. The project will save more than 400,000 gallons of fuel and reduce CO_2 emissions by more than 10,000 metric tons per year. Passengers will see the new vehicles as early as 2012.

Cleaner Trucks Mean Cleaner Air

Environmental agencies and truckers both get on board

Two hundred and seventy-six of the oldest, most polluting trucks serving the Port of Seattle are now off the road thanks to the partnership involving the Port of Seattle and Puget Sound Clean Air Agency—and embraced by area truckers. Since 2009, the Scrappage and Retrofits for Air in Puget Sound (ScRAPS) program has exceeded expectations, providing truckers $5,000 or book value (whichever is greater) for scrapping trucks with pre-1994 engines. Newer, replacement trucks typically emit 60 to 80 percent less air pollution, resulting in immediate local benefits.

2011 also brought the launch of an extensive registry program for all drayage trucks that access our container terminals. Beginning January 1, trucks were required to adhere to new Clean Truck Program Guidelines supporting Northwest Ports Clean Air Strategy goals to lower emissions from all sectors of maritime operations. More than 8,000 trucks and 1,100 trucking companies or truck owners registered in the Drayage Truck Registry (DTR) and earned their "Green Gateway" sticker.

Port of Seattle
Where a sustainable world is headed
2011
WA - ABC1234
1000001234
THE GREEN GATEWAY
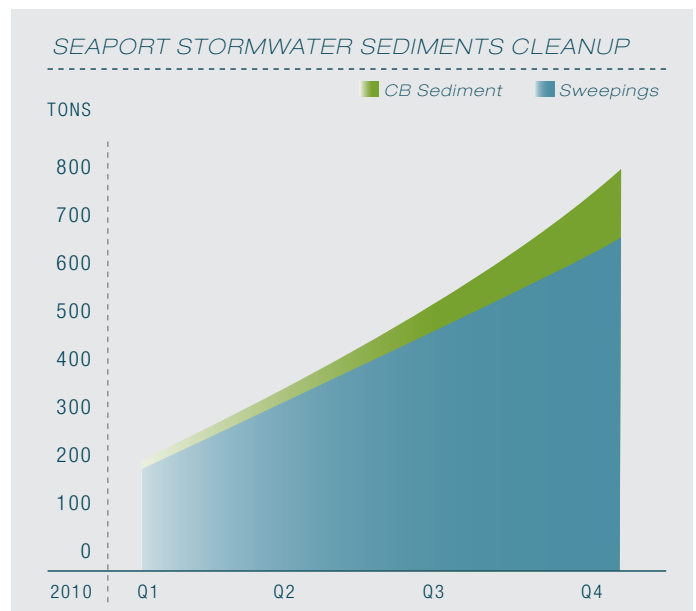
Protecting and enhancing water quality

The waters of the Puget Sound region are a diverse, important, and fragile part of our local economy and ecosystem. We're taking steps to ensure that they remain healthy and protected through every century we celebrate.

Making a Clean Sweep

### Property maintenance as pollution prevention

When debris and other pollutants from vehicles, local uses, and the air accumulate on streets and other surfaces, they can be carried into streams and marine water with stormwater flows. As a preventive measure, the port conducts street, parking lot, and terminal sweeping across our airport and seaport properties. In 2010, we removed 721 tons of material from catch basins and street sweeping on property maintained by the Seaport Maintenance Department, and by mid 2011 prevented another 246 tons of material from entering the marine environment.

SEAPORT STORMWATER SEDIMENTS CLEANUP

CB Sediment | *Sweepings*

TONS
800
700
600
500
400
300
200
100
0

2010 | Q1 | Q2 | Q3 | Q4

Assessing Pollutant Effects on Young Trout

As part of our ongoing stormwater monitoring and compliance program, the port is partnering with the Washington Department of Ecology to develop new testing methodology to assess the overall effects of potential pollutants on fish as they develop in-stream. Known as *in situ* testing, it involves placing trout eggs in baskets within streams to hatch and grow through their most sensitive early life stages. By inspecting the developing fish in the receiving water environment, we hope to assess short- and long-term effects of potential pollutants that might be missed by traditional monitoring methods.
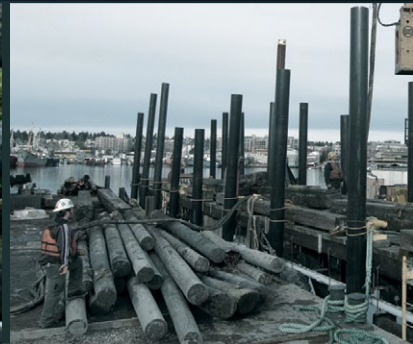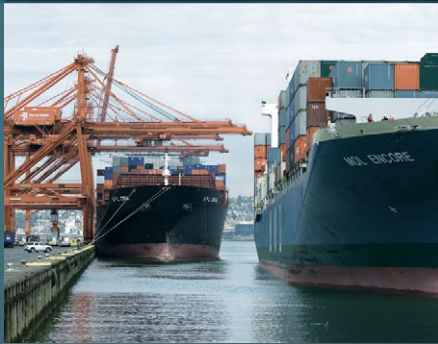
Cleaner Structures,
Cleaner Bay

New foundations for a long-term future

The port recently estimated that since the year 2000, more than 10,000 creosote-treated wooden piles have been removed from Elliott Bay and replaced with more inert concrete, steel or wooden piling. Creosote treated timbers can leak oil-related compounds into the bay. The eventual removal of all port-owned creosote piling will help improve water quality. In 2010 alone, the port removed 696 wooden piles. In an innovative pilot program at the Maritime Industrial Center, the port replaced aging, creosote-treated piling with plastic and fiberglass fender piles. The new low-maintenance piling creates no additional impacts to water quality.

CREOSOTE-TREATED PILE REMOVAL [# of piliings removed]
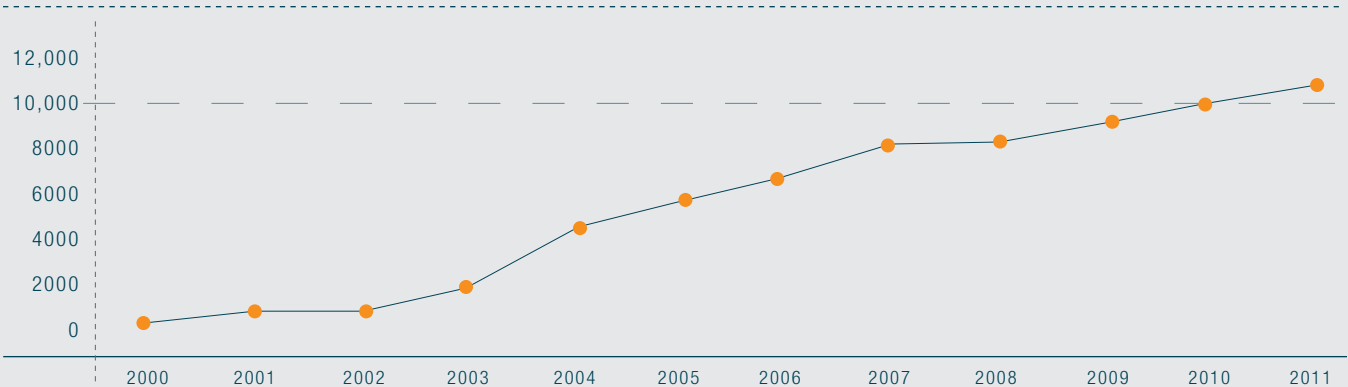
Continuing projects and initiatives

Environmental efforts happen at all levels of port operations, and come in all sizes. Some initiatives and ideas will show their results over weeks and months, others over years and decades. Today we realize more than ever that true sustainability is a centuries-long commitment.

Rental Car Facility Promotes Sustainability

LEED-built garage moves closer to completion

Seattle-Tacoma International Airport's new Consolidated Rental Car Facility (RCF) is a massive work in progress with an opening date projected for spring 2012. The new five-story facility will be home to about a dozen rental car companies, will process up to 13,000 cars on a peak day, and is expected to create 3,000 local, family-wage jobs. It also will meet a number of the U.S. Green Building Council's LEED guidelines.

LEED is an internationally recognized certification system providing third-party verification that a building was designed and built using strategies aimed at improving energy savings, water efficiency, CO_2 emissions reduction, indoor air quality, and resource stewardship. Construction on the 23-acre RCF site promoted the use of many sustainable construction practices. The facility is designed to reduce the need for cooling, heating, and ventilation. The interior construction will use low volatile organic compound paints, sealants, adhesives, and carpeting. And during the build, 96 percent of the construction debris (concrete, wood, drywall, masonry, steel, cardboard and office debris) is being recycled.

Terminal 107_Completed in 2000, the Duwamish Public Access area (below, left) is the Port's third largest park, with eight acres including shoreline access, pathways, and a marine and shoreline habitat restoration area. This park overlooks the Kellogg Island Conservation Area (bottom right).

Lower Duwamish Project

Learning how to heal a multi-use river

This past October, a major milestone was reached when the Feasibility Study for the Lower Duwamish Waterway Super-fund Site was released for public review and comment. The EPA and the Washington State Department of Ecology have worked with the Lower Duwamish Waterway Group (LDWG)—a public-

private partnership consisting of the City of Seattle, King County, the Port of Seattle, and Boeing—to understand health risks from the area's sediment contamination and define a range of options for cleanup. The Lower Duwamish Waterway plays many essential roles, supporting commerce and employment, meeting commercial and tribal fishing needs, and providing critical estuarine environments for salmon and wildlife.

Working with partners and communities

The projects and operations of the port intersect with hundreds of private-sector companies and many thousands of individual lives in our local and global communities. We make it our business to connect with these stakeholders and recognize those who put their own commitments into action.

"Working together isn't just about good business—it's about investing in our region's shared economy and natural environment."

—Tay Yoshitani, Port of Seattle CEO

Into the Wild Green Yonder

Port joins regional collaborative for aviation biofuels

It's hard to imagine today's world without air travel. The airline industry directly generates about 8 percent of global GDP, making it critical for regional and domestic economic growth. But it also generates about 2 percent of all man-made carbon emissions, despite being one of our most efficient forms of travel.

Now the industry has set aggressive goals to lower its carbon footprint, including the potential use of aviation biofuel. In May 2011, Sustainable Aviation Fuels Northwest (SAFN), released results from a 10-month study indicating that Pacific Northwest has the diverse feedstocks, fuel-delivery infrastructure and political will needed to create a viable biofuels industry capable of reducing greenhouse gases and meeting the future fuel demands of the aviation industry. However, creating an aviation biofuels industry will depend upon securing early government policy support.

SAFN is a partnership between Sea-Tac Airport, Alaska Airlines, Boeing, Portland International Airport, Spokane International Airport, and Washington State University, looking at the use of sustainable fuels to help improve the aviation sector's environmental performance while preserving its opportunities for growth, allowing the industry to successfully operate in a low-carbon economy.

COLLABORATING WITH WASHINGTON CONSERVATION CORPS

2010 marked the third year of our wetland management program, initiated as mitigation for construction of Sea-Tac's third runway. Recent studies have found a strong association between the success of created wetland sites and active plant management. The Port's dedicated wetland biologists are working closely with crews from the Washington Conservation Corps to assess plant growth, monitor overall wetland development, and supplement sites with new plantings to ensure a diverse and sustainable habitat.

![The Green Gateway]

The Green Gateway Awards

Inaugural presentations honor environmental achievements

The Port of Seattle's seaport and airport are celebrating their greenest customers with Green Gateway recognition programs. In January, the seaport hosted its first Green Gateway Partners Awards event. Inaugural Gold winners were APL Ltd., Maersk Line, Norwegian Cruise Line, Royal Caribbean and Celebrity Cruises. Our Silver award winner was Matson Navigation. COSCO achieved a Bronze award. A minimum requirement is participation in the Port's At-Berth Clean (ABC) Fuels vessel incentive program, or use of shore power.

In 2010, Aviation Environmental staff created Sea-Tac Airport's Environmental Excellence Award Program to recognize outstanding projects, processes and people who incorporate environmental stewardship and leadership. The program encourages tenant support for airport environmental initiatives and sustainability goals established under the airport's 2009 Environmental Strategy.

Both Alaska Airlines and HMSHost won in the Environmental Performance Category for recycling and composting. Alaska Airlines increased its in-flight recycling capture rate from 28 percent in 2009 to 46 percent in 2010, and increased recycling at its Sea-Tac flight kitchen from 25 tons in 2009 to 106 tons in 2010.

1971_Port of Seattle focuses a new staff position on creating an airfield unattractive to aircraft-hazardous birds.

1989_Sea-Tac passes half-way mark in airline use of aircraft modified to reduce noise.

2009_Port adopts "Green Gateway" label as greenest route for cargo shipped by sea from Asia.

HMSHost diverted about 90 percent of its pre-consumer food scraps from landfills by using composting procedures at all of its Sea-Tac Airport food preparation areas. In addition, HMSHost recycled 70 tons of cardboard.

Part 150 Study Community Meetings

Listening to feedback about aircraft noise

At Sea-Tac Airport, the Federal Aviation Regulation Part 150 Aircraft Noise, also called the Airport Noise Compatibility Study, is a planning effort designed to address and mitigate the effects of aircraft noise within the communities that surround the airport. We completed our first Part 150 Study in 1985 and, nearly three decades and three updates since, our work continues.

The latest Part 150 Study, to be submitted to the Federal Aviation Administration in late 2011, includes extensive involvement from communities around the airport.

Port staff and the consulting team have held numerous community meetings to understand local concerns about noise. The combined insight from this direct public feedback and the study results will help guide the updating of the port's comprehensive noise abatement and sound insulation efforts, recognized as a leading aircraft noise reduction program.

Congratulations to Our Quietest Fliers

Airline partners receive incentive program awards

The winners of the 2011 Fly Quiet Awards were announced in May, with Air Canada Jazz finishing first, SkyWest Airlines (United Express) second, and Mesaba Airlines (Delta Connection) taking honorable mention. The Fly Quiet incentive program, established by port staff and a citizen advisory committee, honors airline companies that work to reduce the impacts of jet noise for residents. Evaluations include use of noise abatement flight paths, overall noise level of operations, and compliance for testing engines on the ground.

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Recognizing Our Quietest Fliers
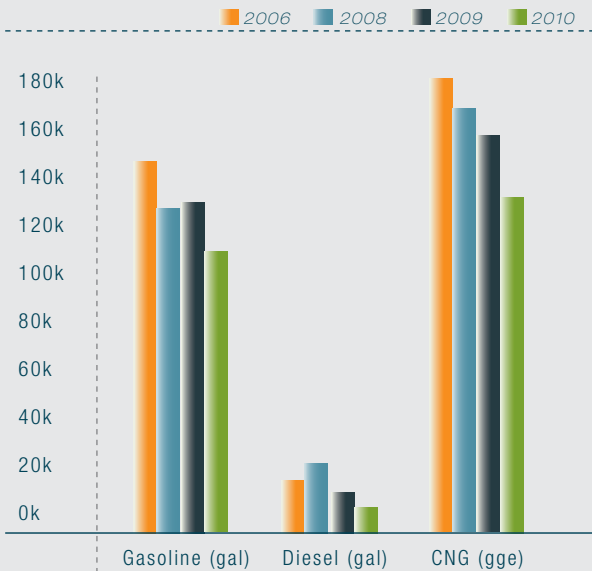
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2010 Environmental Metrics

Air Quality & Climate Change

FUEL USE BY TYPE

2006 *2008* *2009* *2010*

Fuel Use By Type bar chart showing Gasoline (gal), Diesel (gal), and CNG (gge) for years 2006, 2008, 2009, 2010. Y-axis from 0k to 180k.

GREENHOUSE GAS EMISSIONS

	2006	2008	2009	2010
POS Emissions (metric tons)	21,574	21,862	23,819	21,536
POS EMissions per passenger (lbs)	1.59	1.5	1.68	1.5
Airlines/Tenant Emissions (metric tons)**	4,214,806	n/a	n/a	n/a
Pulic Emissions (metric tons)**	373,033	n/a	n/a	n/a

*2006, 2008, and 2009 values have been adjusted to conform to The Climate Registry inventory protocol and to account for a utility specific emission factor. ** Will be inventoried every 5 years at a minimum.

TRANSPORTATION

2.6 AVERAGE NUMBER OF OCCUPANTS PER VEHICLE TRIP

OCEAN GOING VESSEL (OGV)

OGV Performance Measure
Air Quality & Climate Change

"By 2010, reach the equivalent PM (particulate matter) reduction of using distillate fuels with a maximum sulfur content of 0.5% for all hotelling auxiliary engine operations; Use of fuels with a maximum sulfur content of 1.5%, or use of equivalent PM reduction measures for all hotelling main or diesel electric engine operations (generally cruise vessels)."

72.4% OF ALL CRUISE AND CONTAINER SHIPS MET OR EXCEEDED THE 2010 OGV PERFORMANCE MEASURE

AT-BERTH CLEAN FUELS VESSEL INCENTIVE PROGRAM

The At-Berth Clean Fuels program (ABC Fuels) launched on January 1, 2009 provides incentives to vessels that use 0.5% (or less) sulfur fuels in auxiliary engines while at berth. Frequently calling vessels met or exceeded the 2010 OGV performance measure.

340 METRIC TONS OF SULFUR DIOXIDE EMISSIONS ELIMINATED SINCE 2009

400 QUALIFYING VESSEL VISITS IN 2010, INCLUDING MORE THAN 75 VESSELS AND NINE CARRIERS

> "Cutting CO_2 emmissions is a major priority. Aircraft pre-conditioned air innovation alone will reduce emissions by 40,000 metric tons annually."
> —Bill Bryant, Port of Seattle Commission President

Materials Use & Recycling

Environmental purchasing gains traction

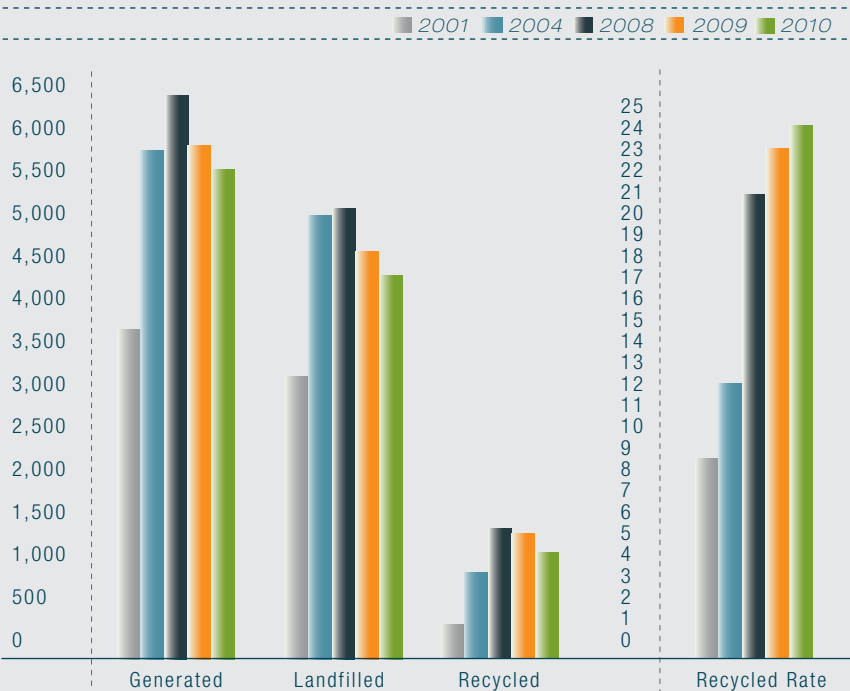### Sustainable practices support local business

At the port, we live our commitment to sustainability in our offices as well as on our airfields and seaport terminals. Since the 2007 inception of our Environmental Purchasing Policy promoting the purchase of goods made from recycled or reused materials, recycled paper use is at 98 percent, and the use of "green" office products has increased by 33 percent. In addition to helping save the environment, the program has also saved thousands of dollars each year as we use less and find cost-effective alternative products.

And while going "green" has been good, supporting local businesses has been great. Our local office products supplier offers a variety of sustainable goods and collects delivery boxes for reuse. Recycled paper also is purchased locally from a supplier in Hoquaim, Washington, whose process uses recycled products and fewer chemicals.

ENVIRONMENTALLY PREFERABLE PRODUCTS [as a % of total purchased]

= office products
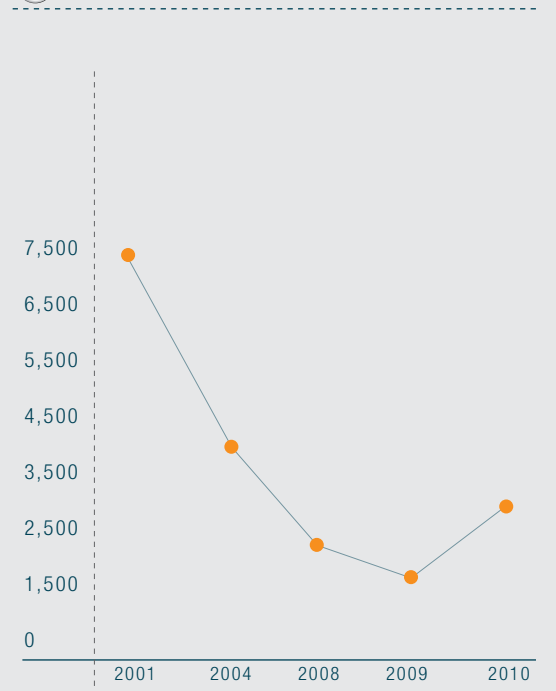= recycled paper
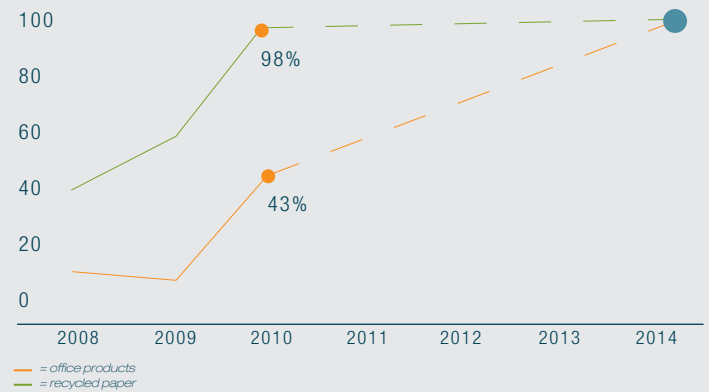
MUNICIPAL SOLID WASTE [tons]

2001 2004 2008 2009 2010

Generated   Landfilled   Recycled   Recycled Rate

*2010 data does not include airfield waste

HAZARDOUS WASTE GENERATED [lbs.]

2001 2004 2008 2009 2010

2010 Environmental Metrics

Energy Use & Conservation

✈ ELECTRICITY USE [kWh] AT SEA-TAC AIRPORT

148,715,000
4.62

145,087,553
4.95

147,867,000
4.73

145,134,639
4.60

145,000,000

133,508,734
4.70

| 2000 | 2005 | 2008 | 2009 | 2010 |
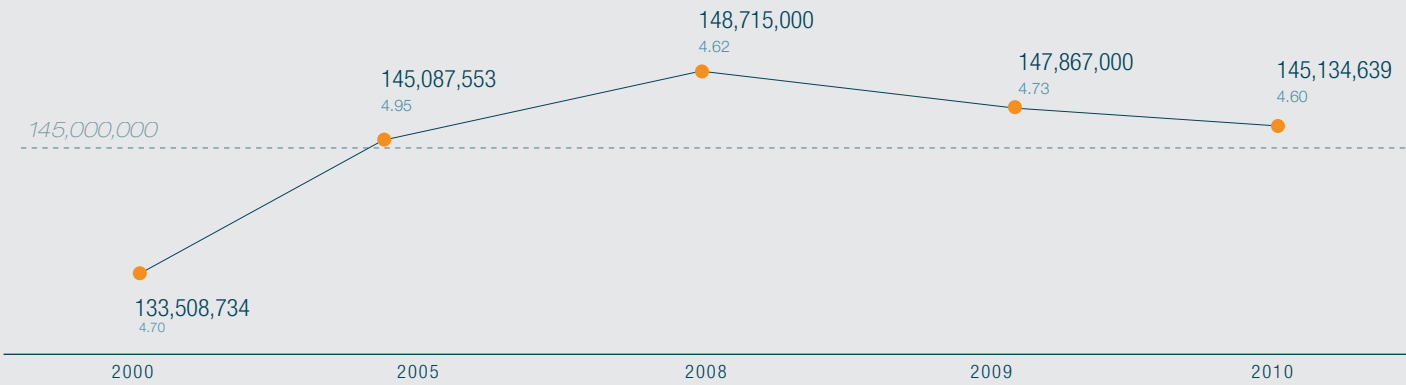
= Total kwh of electricity used
= Kwh per passenger

✈ NATURAL GAS USE [therms]

2,813,851
0.087; 0.92

2,800,000

2,476,400
0.085; 0.81

2,375,219
0.083; 1.03

2,718,975
0.087; 0.89

2,679,707
0.085; 0.88

| 2000 | 2005 | 2008 | 2009 | 2010 |
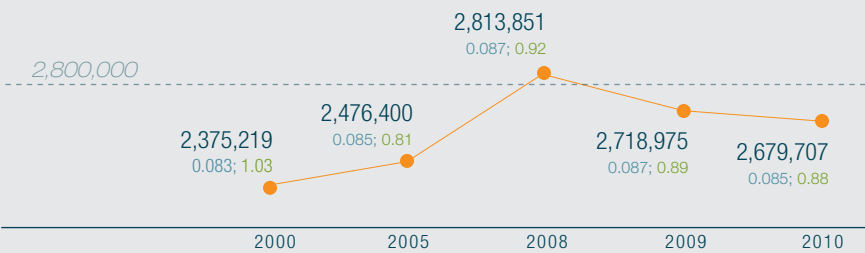
= Total therms used
= Therms per passenger
= Therms per sq. ft. of terminal

✈ CONSERVATION

[total kWh/yr. of energy saved]

2008	2009	2010
46,282,904*	139,651	10,429

*2008 data is based on the total kWh
of energy saved leading up to 2008.

Airport Buildings & Infrastructure

1,225,000

SQUARE FEET GREEN BUILDINGS
OR LEED™ RATED BUILDINGS IN
2008, 2009, 2010.

3 PROJECTS

NUMBER OF CAPITAL, TENANT,
OR CONCESSIONS PROJECTS
ACHIEVING OR PROPOSED
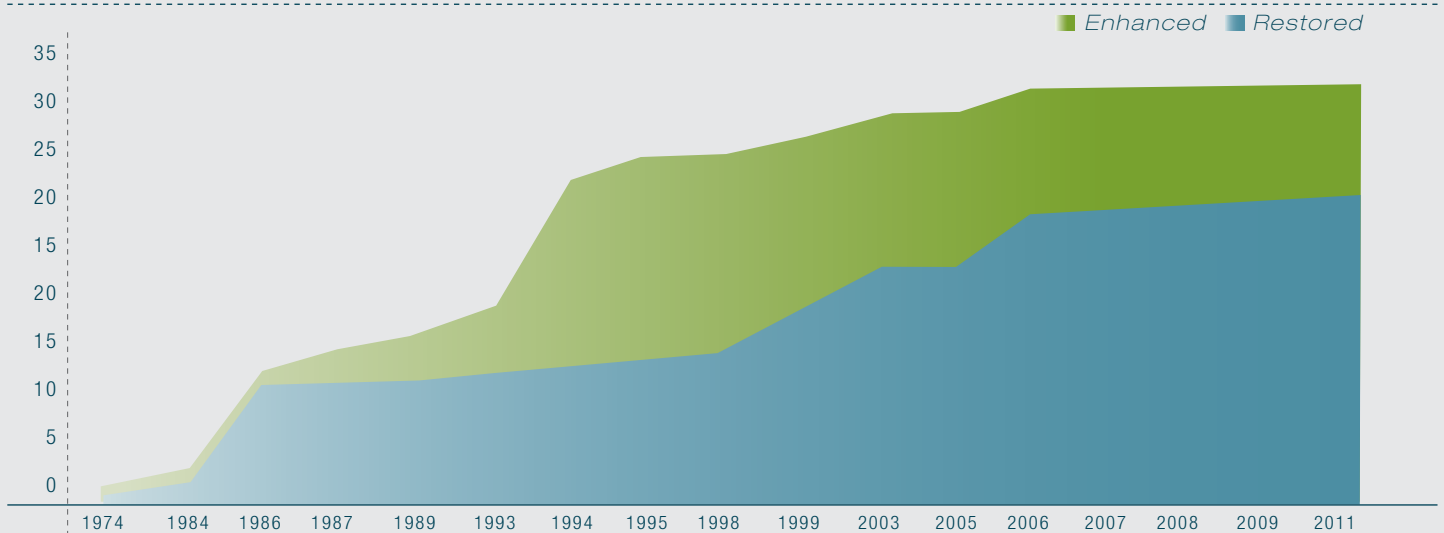FOR LEED™ CERTIFICATION
IN 2008, 2009 & 2010

FACILITY CONDITION INDEX [%]

2008	2009	2010
25.39	21.10	24.3

Facility Condition Index (FCI) is a strategic capital planning tool
used to compare the relative condition of a facility. The FCI is
expressed as a ratio of the cost of remedying maintenance
deficiencies to the current replacement value.

Water Resources

2010 HABITAT RESTORATION MANAGEMENT (ACRES)

Legend: Enhanced, Restored

Years: 1974, 1984, 1986, 1987, 1989, 1993, 1994, 1995, 1998, 1999, 2003, 2005, 2006, 2007, 2008, 2009, 2011

WATER CONSUMPTION

	2006	2007	2008	2009	2010
Portable water use [gallons]	258,924,717	271,486,753	227,466,888	220,467,366	217,224,561
Portable water use per passenger	8.63	8.67	7.06	7.06	6.88

WATER QUALITY

	2006	2007	2008	2009	2010
% acreage with water quality BMPs [%]	49	78	100	100	100
% acreage with flow control BMPs [%]	7	58	85	90	90
NPDES permit exceedances	-	-	39*	27	20

*In 2008, we erroneously reported the number of permit exceedance notifications to the Department of Ecology.

While preparing this year's report, we noted exceedances were included in each notification. The 2008 and 2009 values in this report reflect individual permit exceedances.

Definitions

The term "restored" means the reestablishment of fish and wildlife habitat in areas that were historically converted for other uses. "Enhanced" means the improvement of poorly functioning existing habitat.

In 2010, a comprehensive review of past and present marine fish and wildlife habitat projects was completed by a graduate student intern from the University of Montana. The review concluded that the Port of Seattle has enhanced or restored more than 30 acres of fish and wildlife habitat since 1974 – far more than previously thought. In the coming years, this number will continue to increase as the Port undertakes priority projects identified in the Lower Duwamish River Habitat Restoration Plan (2009).

Recognition for achievements

As a leader in environmentally responsible policy and innovation, we're honored when our efforts are recognized. But even as we appreciate the accolades, they're also a great incentive to keep striving for even better results.

2010 AAPA Environmental Improvement Award

Program helps tenants maintain compliance

Throughout the Port's 100 years, we've been the recipient of many awards. One of the most recent—and most important, because it was bestowed by our peers— was a 2010 Environmental Improvement Award from the American Association of Port Authorities (AAPA) for our Environmental Compliance and Assessment Program (ECAP).

ECAP is a tenant-focused program designed to minimize the environmental impacts of tenant activities and maintain regulatory compliance through education and compliance assessment. Rather than focusing on enforcement, ECAP team members work collaboratively with tenants—and their business objectives—to minimize environmental impact. The Port was one of four ports nationwide to be recognized.

Smith Cove Park_Port-owned Smith Cove Park overlooks Terminal 91, the site of the Great Maritime Strike of 1934, and now a homeport for cruise lines.

Cruising_Passenger cruises started in Seattle in the late 1800s. Today, Smith Cove Cruise Terminal provides two electrical hookups for cleaner ship operation at berth.

Sea-Tac_As air travel soared in the 1950s, ship travel tapered. Today, airlines bring Alaska-bound cruise passengers from all over the world.

Sea-Tac Environmental Strategy Plan Recognized

Airport wins ACI-NA Environmental Achievement Award

The largest of the organization's five regions, Airports Council International – North America (ACI-NA) provides services and advocacy that strengthen its members' ability to serve passengers, customers, and communities. The Port of Seattle was honored to receive an ACI-NA 2010 Environmental Achievement Award. The award was based on Sea-Tac Airport's "Environmental Strategy Plan – A Vision for 2010 and Beyond," a roadmap of planning, budgeting, and accountability for achieving our goals by 2014. The Environmental Achievement Award describes Sea-Tac's plan as "the linchpin for the success of its environmental program and [one that] can serve as a role model for other airports."

Fleet Named One of the Nation's Greenest

Port of Seattle makes the top-20 list

Since 2002, the Port of Seattle has been using CNG (compressed natural gas) vehicles, adding hybrid vehicles to our fleet in 2003 and beginning biodiesel use in 2006. Recently our seaport earned a national Government Green Fleet award for these environmental practices, taking our place in a nationwide survey at number 20 out of 100 federal, state, and local vehicle fleets. An overall commitment to programs relating to air quality, having a fleet policy with a green fleet section, and aggressive green practices at our Marine Maintenance shop all contributed to the Port's high ranking.

Best Workplace for Recycling

Sea-Tac named for fourth consecutive year

King County's Solid Waste Division has, for the fourth year in a row, named Sea-Tac Airport to the annual Best Workplaces for Recycling & Waste Reduction, one of 75 organizations to make the 2010 list. Sea-Tac was recognized for strong internal recycling programs and for a commitment to reducing the amount of waste produced.

To qualify for the award, organizations like Sea-Tac met at least 10 criteria from a list of good business recycling practices, with choices ranging from placing recycling

Help Sea-Tac Reduce Waste

Passengers dining in the Central Terminal now can compost food scraps and recycle bottles, cans and paper. The Port of Seattle introduced new collection bins as part of the Sea-Tac's Airport's continuing efforts to reduce contributions to landfills. Tabletop decals encourage diners to think about where they toss their trash. A recent study found that 44 percent of airport waste is compostable, and public areas generate nearly half of all airport waste. More than 100 tons of food scraps and other compostables were collected and diverted from landfills during the first six months of the pilot project. Collected compostable material goes to a local facility that converts it into nutrient-rich soil amendments for gardens and landscaping. Recyclables are sent to recycling facilities.

bins by every desk and collecting food scraps for composting to having internal "green teams."

Beyond recognizing top recyclers and waste reducers, the purpose of the award is to help show the local business community that improving these programs can make good sense economically as well as environmentally.

*SEA-TAC AIRPORT
COMPOSTING PROGRAM*

100 TONS OF FOOD SCRAPS AND COMPOSTABLE WASTE DIVERTED FROM LANDFILLS

Port of Seattle

Where a sustainable world is headed.™

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